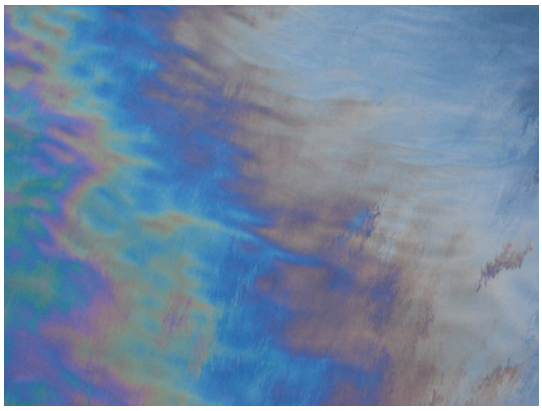
Daily Report
R/V Ocean Veritas
May 29, 2010
Eric Dubinsky and Olivia Mason

The cable attached to the CTD rosette that was repaired the night before required further attention in the morning.

CTD rosette deployed at noon at sight OV009. A slight sheen of oil was observed on the surface. No oil was detected at depth down to 1400 m (see attached). Surface samples only were collected for full biological and chemical characterizations.

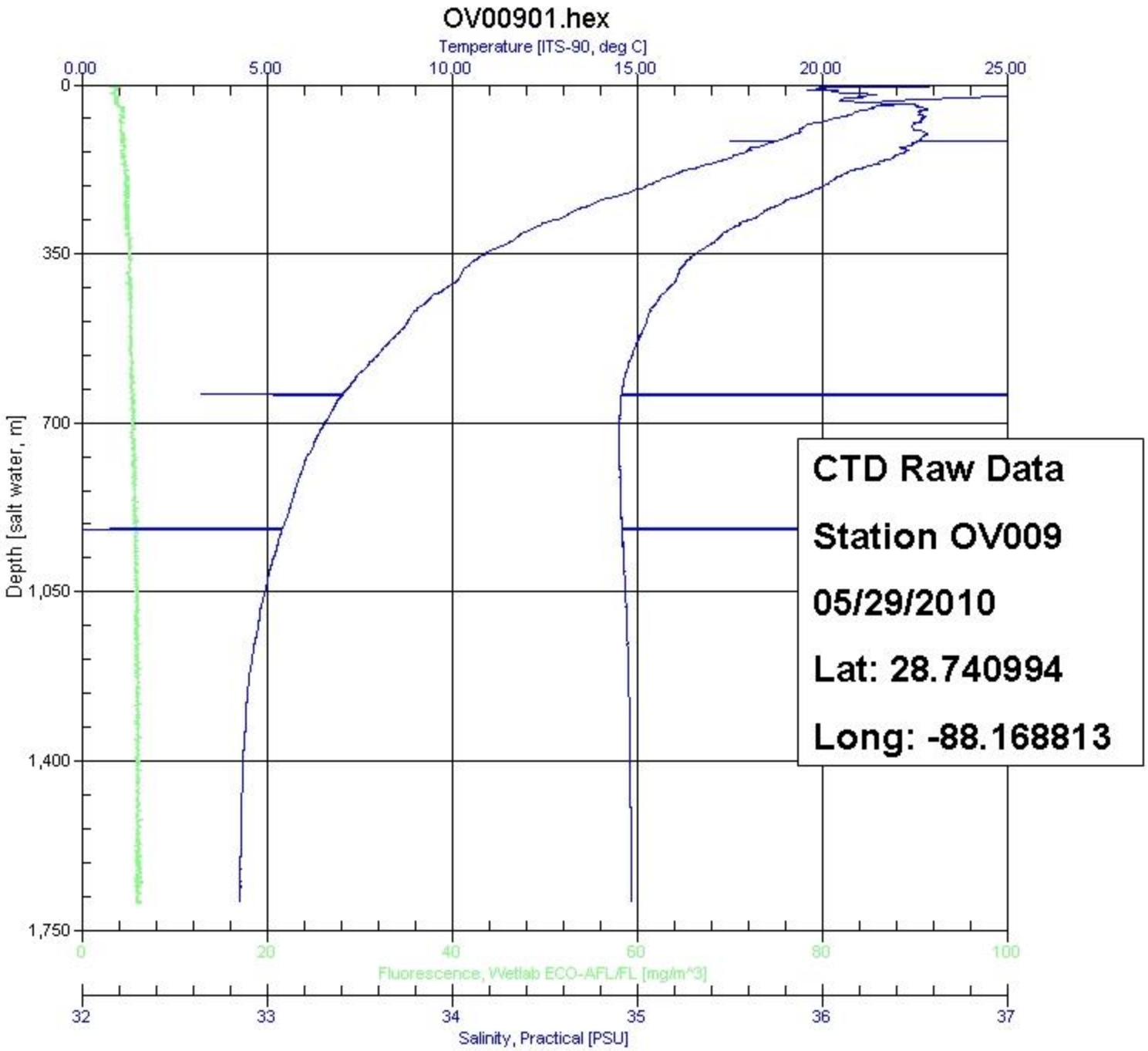
CTD rosette deployed at 14:30 site OV010 (see above discussion for criteria used to select this site). A lot of oil was observed at the surface. The oil was mostly a sheen on the surface, with no weathered oil observed. LISST analysis showed that this area of surface oil consisted of small droplets, suggesting that it had been treated with dispersants. The underwater plume was observed at 1100-1160 m depth (see attached). Samples were taken at depths of 500, 1100, 1135 and 1155 m**.** Note: It appeared that the CTD hit the bottom upon deployment; however, no sediment was observed in the samples by LISST analysis. Due to an electrical problem the 2 m niskin bottle did not fire properly due to an electrical problem; therefore, no sample was recovered at this depth.

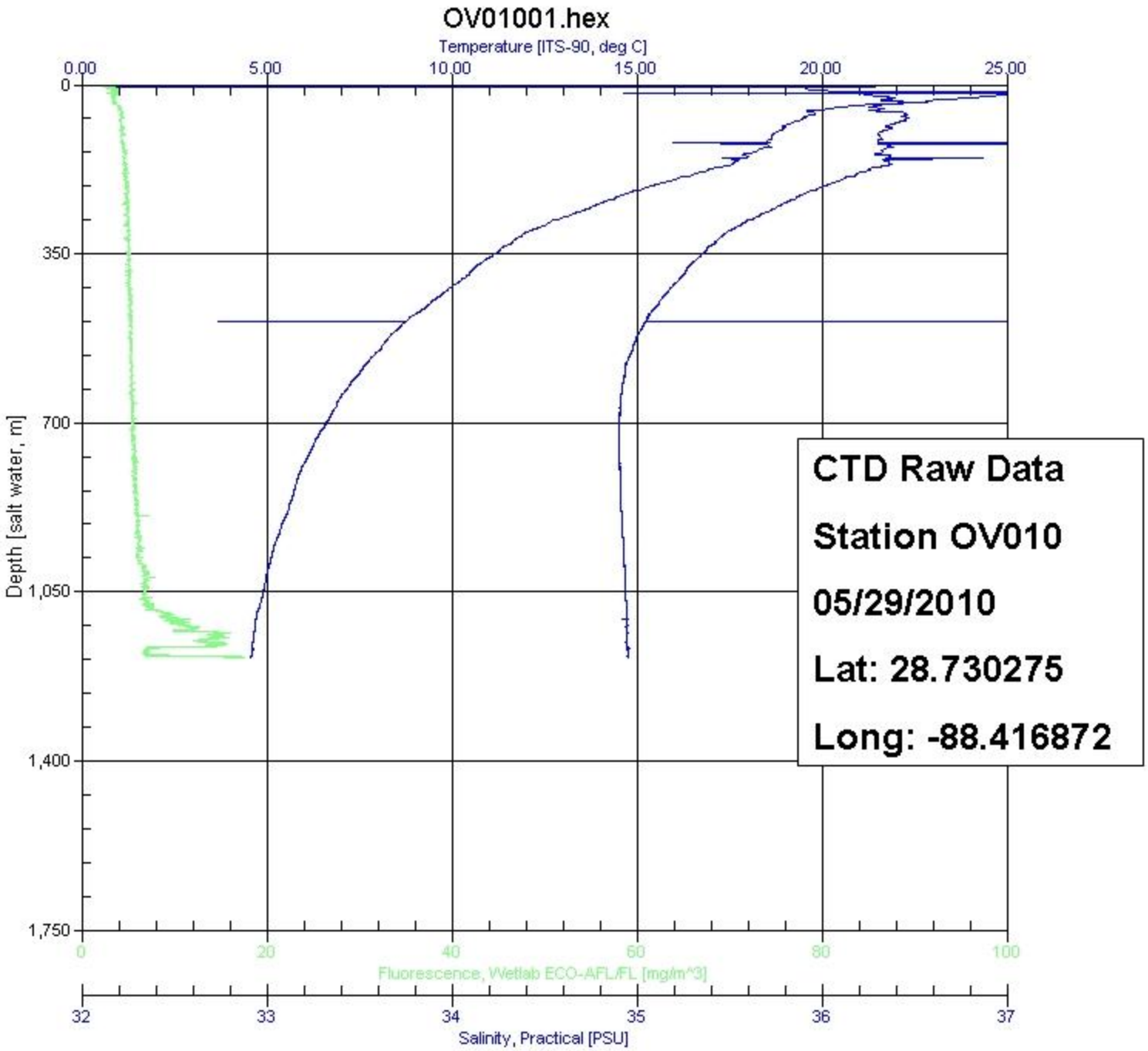
CTD rosette deployed at site OV011 at 19:24. This site represents the benchmark site B52 where underwater plume is consistently detected. An oily sheen was observed at the surface, little weathered oil was present.

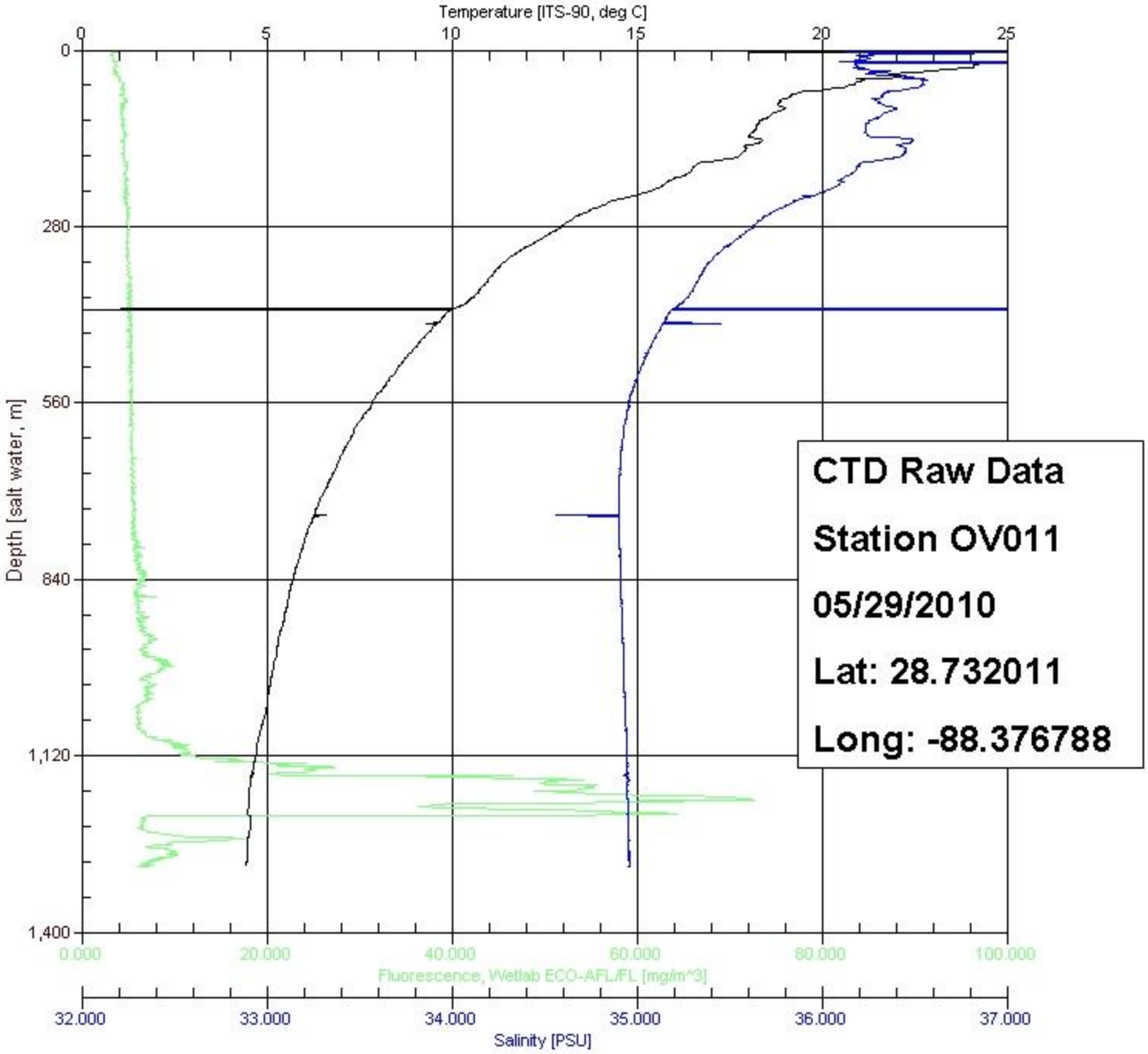


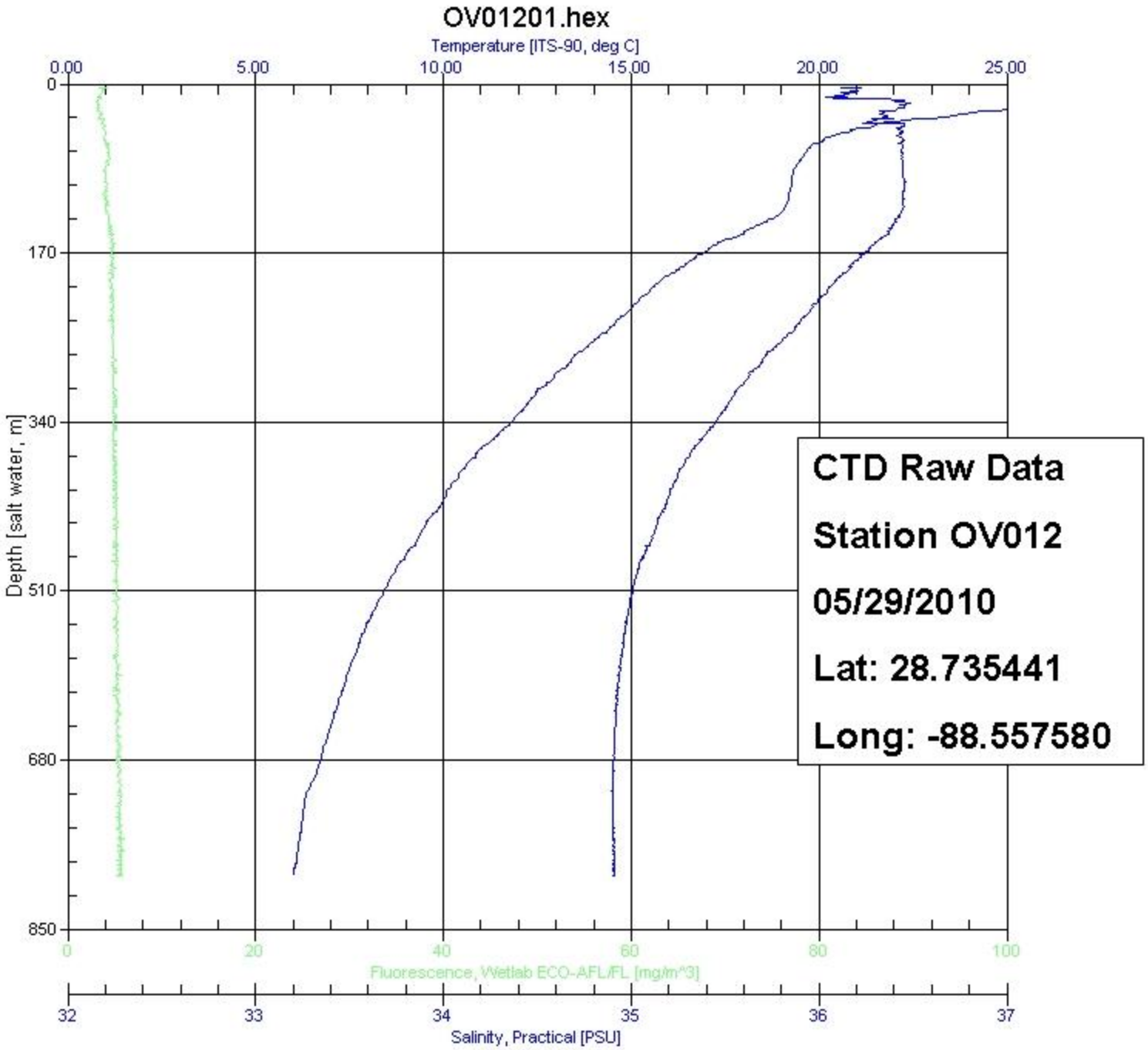
The underwater plume was observed at a depth of 1120-1270 m at concentrations not previously observed by the Brooks McCall (see attached). Samples were taken at depths corresponding to fluorometry peaks (1181, 1207 m), depths bracketing the plume (1042, 1285 m), and 500 m.

CTD rosette deployed at site OV012 at 22:00. Depth to bottom was 800 m. No oil was observed on the surface or at depth (see attached). Surface samples were collected for a full characterization. No samples were collected at depth.


OV00901.hex
Temperature [ITS-90, deg C]
0.00
5.00
10.00
15.00
20.00
25.00
0
350
700
1,050
1,400
1,750
Depth [salt water, m]
0
20
40
60
80
100
Fluorescence, Wetlab ECO-AFL/FL [mg/m^3]
32
33
34
35
36
37
Salinity, Practical [PSU]
CTD Raw Data
Station OV009
05/29/2010
Lat: 28.740994
Long: -88.168813


OV01001.hex
Temperature [ITS-90, deg C]
0.00
5.00
10.00
15.00
20.00
25.00
0
350
700
1,050
1,400
1,750
Depth [salt water, m]
CTD Raw Data
Station OV010
05/29/2010
Lat: 28.730275
Long: -88.416872
0
20
40
60
80
100
Fluorescence, Wetlab ECO-AFL/FL [mg/m^3]
32
33
34
35
36
37
Salinity, Practical [PSU]


Temperature [ITS-90, deg C]
0
5
10
15
20
25
Depth [salt water, m]
0
280
560
840
1,120
1,400
CTD Raw Data
Station OV011
05/29/2010
Lat: 28.732011
Long: -88.376788
0.000
20.000
40.000
60.000
80.000
100.000
Fluorescence, Wetlab ECO-AFL/FL [mg/m^3]
32.000
33.000
34.000
35.000
36.000
37.000
Salinity [PSU]


OV01201.hex
Temperature [ITS-90, deg C]
0.00
5.00
10.00
15.00
20.00
25.00
0
170
340
510
680
850
Depth [salt water, m]
0
20
40
60
80
100
Fluorescence, Wetlab ECO-AFL/FL [mg/m^3]
32
33
34
35
36
37
Salinity, Practical [PSU]
CTD Raw Data
Station OV012
05/29/2010
Lat: 28.735441
Long: -88.557580